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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	
Request for Comment on North American Numbering Council Letter Seeking Clarification of the Term "Technology Neutral"	DA 97-2234 CC Docket No. 92-237

Reply Comments of the
Ad Hoc Telecommunications Users Committee

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SUMMARY

The Ad Hoc Telecommunications Users Committee strongly supports an interpretation of the phrase "technology neutral" that gives state commissions maximum flexibility to implement management plans that conserve and efficiently utilize numbering resources. Only through reasonable conservation measures, like NXX-X Number Pooling, can states hope to avoid the significant and mounting costs imposed by the escalating demands for new telephone numbers, which have up to now been addressed through as all-services overlays or geographic splits of NPA codes. Conservation measures would not violate the "technology neutral" principle; numbering resources created thereby would be available to any carrier that made the necessary investment in LRN LNP switching technology. Moreover, by using existing numbering resources more efficiently, the benefit would inure to *all* carriers, even those that do not implement LRN technology.

The professed technical inability of wireless carriers to participate in reasonable number resources management and conservation programs is often based upon self-interested economic concerns which do not *per se* render such a program in violation of the Commission's "technology neutral" standard. If wireless carriers confront any "barrier" at all to the deployment of LRN LNP, it is an *economic,* not a technological.

The "technology neutrality" principle was intended to protect carriers and services against arbitrary numbering treatment. It was not intended to be used by a class of carriers as a legal device to constrain efficient and effective number resource management. The wireless carriers have employed the

"technology neutral" standard in just this way, selectively ignoring it in order to justify special treatment in a number of area code splits. Special treatment gives wireless carriers an undue advantage over their wireline counterparts. A strict constructionist application of the principle of technology neutrality in numbering policy would not permit special treatment for any type of carrier. Similarly, a flexible application of this principle must be balanced so as not to unduly favor one technology while burdening others, as the special treatments afforded wireless carriers have done.

Accordingly, the Ad Hoc Committee urges the Commission to support innovative efforts at addressing number relief, such as the plan adopted by the Pennsylvania PUC. The Commission should soundly reject efforts by wireless interests to interfere with such initiatives. The "technology neutral" standard should be applied to protect carriers and customers against arbitrary exclusion form geographically-based NPAs. It should not be used to limit regulatory efforts to impose reasonable and efficient technical standards and requirements for inclusion in such numbering arrangements.

Finally, the commission should revisit its prior prohibition against service-specific NPAs, because in combination with number pooling, the assignment of NPAs specifically designed for use by mobile services can serve to eliminate the future need for area code changes for both fixed and mobile services, thereby minimizing aggregate social and economic costs while assuring maximum availability of telephone numbers to all carriers and all services.

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The Ad Hoc Telecommunications Users Committee ("Ad Hoc Committee") hereby submits its reply to comments filed in response to the Commission's public notice on the North American Numbering Council's ("NANC's") letter request for clarification of the Commission's "technology neutral" standard for numbering administration.[1]

I. BACKGROUND

The *Public Notice* sought comment on the definition of "technology neutral" as that term was used by the Commission in a January, 1995 declaratory ruling ("*Ameritech Ruling*").[2] In that ruling, the Commission rejected a proposal by Ameritech

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1 *Common Carrier Bureau Seeks Comment on North American Numbering Council Letter Seeking Clarification of the Term "Technology Neutral,"* Public Notice, DA 97-2234 (Comm. Carr. Bur. released October 20, 1997) ("*Public Notice*").

2 *Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech-Illinois*, IAD File No.

to establish a so-called "wireless overlay" Numbering Plan Area ("NPA") covering the same geographic footprint as the then-existing '708' NPA in the Chicago suburbs.[3] Specifically, the Commission prohibited what it deemed to be discriminatory access to, or exclusion from, specific NPAs based upon the nature of the *technology* (e.g., wireline vs. wireless) through which a particular service is furnished.

In proposing a "wireless overlay," Ameritech had sought to exclude wireless services from the then-existing '708' geographic NPA, and in so doing to preserve '708' exclusively for wireline services. The *Ameritech Ruling* had also been sought by several wireless carriers who viewed the segregation of their services into an NPA separate and apart from the one utilized by wireline services to be anticompetitive. In rejecting the concept of a wireless overlay, the Commission adopted a policy of "technological neutrality" with respect to numbering and number assignment, ruling that wireline and wireless services and carriers are to be afforded the same degree of access to a common pool of number resources.

As a direct result of the FCC's Ruling, the Illinois Commerce Commission determined that it was compelled to adopt either (a) an "all-services overlay" or (b) a geographic split of the '708' NPA. In a decision issued March 20, 1995, the Illinois Commission adopted a three-way geographic split, creating two new NPAs — '847' and '630' which, along with a diminished '708' NPA, collectively serve the Chicago suburbs.[4]

94-102, *Declaratory Ruling and Order*, FCC 95-19, 10 FCC Rcd. 4596 *released* January 23, 1995 ("*Ameritech Ruling*").

3 *Id.*, at para. 37.

4 Illinois Commerce Commission Docket No. 94-0315, *Illinois Bell Telephone Company Petition for Approval of NPA Relief Plan for 708 Area Code by Establishing a 630 Area Code*, Order, March 20, 1995 ("*708 Order*"). The 708 split between 708 and 847 occurred in January 1996, and the subsequent split of the 708 between 708 and 630 occurred in August 1996.

The following year, the Illinois Commission also adopted a geographic split of the '312' NPA serving the City of Chicago, establishing a new '773' NPA covering all but the City's central "Loop" business district.[5]

More recently, various consumer and competitive local exchange carrier ("CLEC") parties have proposed, and several state commissions have considered and/or adopted, alternative area code relief measures that certain wireless carriers have challenged. The wireless carriers contend that the measures amount to *de facto* violations of the Commission's technological neutrality policy in that, according to these carriers, they cannot as a technical matter comply with the proposed or adopted relief measures. The PN seeks comment, specifically, on the question of whether certain types of area code relief measures that may be difficult for some carriers to implement would violate the technological neutrality principle with respect to those carriers.

Once a relatively rare event, the introduction of new area codes is increasing at a previously unheard-of pace. Less than 30 new codes were introduced over the nearly 40 years between 1947 (when the North American Numbering Plan was defined) and 1994 (i.e., just before the availability of so-called "interchangeable" NPA codes[6]). In the two-and-a-half years since interchangeable NPA codes became available at the

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[5] Illinois Commerce Commission, Docket 95-0371, *Illinois Bell Telephone Company Petition for Approval of Stipulation and Agreement of the Parties for a 312 Relief Plan*, Order, November 20, 1995 ("*312 Order*").

[6] Prior to 1995, all NANP area codes were of the "N0/1X" format, i.e., the middle digit was always a zero or a one. This restriction allowed area codes to be distinguished from 3-digit central office codes which, historically, would never have a zero or a one as the second digit. In the mid-1980s, that restriction was eliminated for central office codes in some areas (i.e., the so-called "NNX" format was replaced by the "NXX" format), and in 1995 the "NXX" format became available for area codes as well. As a result, the potential quantity of area codes was increased from 160 to 800. The term "Interchangeable NPA code" has been used to indicate that the same 3-digit NXX sequence may now be used both for area codes and for central office codes.

beginning of 1995, nearly 60 new area codes have been introduced. Some 52 additional area code introductions are in progress or planned as of this date. Most of these have been or will be in the form of geographic splits, while a few have taken the form of an "all-services overlay" of the new area code on top of the same geographic area as the old code.

Both of these solutions have serious shortcomings. Under geographic splits, business and residential telephone subscribers are forced to change their telephone numbers and in many telephone numbers they call frequently. Between the beginning of 1995 and the end of the decade, as many as 40-million US telephone numbers may be subjected to one, or in some cases multiple, area code changes. Under "all services overlay" solutions — the alternative to a geographic split — mandatory 10- or 11-digit local dialing is imposed, even for calls to numbers within the same area code as the calling party.[7] Thus, businesses and government agencies that maintain extensive data bases containing customer or citizen data — including telephone numbers — may be confronted with the costly, time-consuming and potentially error-creating task of making extensive revisions to these records. While number changes are inconvenient for residential consumers, for businesses, government, and institutions they create often significant costs and can potentially lead to a loss of business if in the future a potential customer who dials the "old" number and reaches either a wrong number (if the old NXX code was reassigned) or a "not in service" message, erroneously (but not surprisingly) concludes that the firm has dropped off the face of the Earth.

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[7] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket 96-98, FCC 96-325, 11 FCC Rcd. 15499, *released* August 8, 1996, at paras. 67-68.

Reports in the popular press often blame the growth of modems and fax machines as well as cellular phones for the number exhaust problem. In fact, the real explanations can be traced to several administrative and regulatory causes:

- The existing requirement, as set forth in the Industry Numbering Committee Central Office Code Assignment Guidelines[8] and as practiced by NPA code administrators, that carriers (particularly CLECs) be assigned an entire 10,000-number NXX code in *each rating area* in which they wish to offer service;

- ILEC number administrators' issuance of new NXX codes to CLECs, wireless carriers, and ILECs with little regard for and no attempt to ascertain actual demand for the underlying number-using services;

- Demands by wireless carriers for assignment of number resources (in the form of full NXX codes) far beyond the number of actual subscribers for these services; and

- Constraints imposed by the FCC upon the ability of state commissions, to whom the FCC has granted direct regulatory responsibility for area code policy within their respective jurisdictions but subject to FCC oversight, to effectively manage number resources.

In an effort to find alternatives to all-services overlays and geographic splits, several state commissions have in recent months begun to explore NPA relief measures that focus upon more precise assessments of claims regarding the *demand* for numbers rather than upon arbitrarily expanding their *supply* through the creation of additional area codes. One particularly promising option that has been receiving considerable attention is the use of Local Number Portability ("LNP") technology, which permits the same 10,000-number NXX block to be shared by several carriers. Such a

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[8] Industry guidelines describe code splitting or "code sharing" as "the assignment of the same Central Office code to two or more Central Office entities, thereby gaining increased use of station numbers in low-fill offices." These guidelines indicate that the offices are usually differentiated by the NXX-X digit, and furthermore state that central office code sharing "is only practical if the entities involved are within the same toll-rate exchange area and there are economic benefits to be gained." However, the INC *Central Office Code (NXX) Assignment Guidelines* currently require that before NXX code sharing is implemented it should be "mutually agreed to by affected parties." Industry Numbering Committee (INC) *Central Office Code Assignment Guidelines*, April, 1997, Section 4.3.

solution could significantly reduce the growth in NXX code assignments and forestall or eliminate the ensuing NPA exhausts, and would in principle and in practice make the arrival of multiple CLECs largely transparent to the aggregate demand for numbers. This type of arrangement, which has become known generally as "NXX-X Number Pooling," requires implementation of Location Routing Number ("LRN") LNP. LRN LNP is in the process of being implemented in most metropolitan areas pursuant to a Commission order in CC Docket No. 95-116.[9] The metropolitan statistical area ("MSA") phase of LNP deployment for wireline carriers has already commenced, and will be largely completed by early 1999.

On July 15, 1997, the Pennsylvania PUC adopted an area code relief plan for the 717, 215 and 610 NPAs.[10] In that order, the Pennsylvania commission decided to pursue NXX-X Number Pooling when LNP becomes available, and in the interim to adopt *temporary* number conservation measures that avoid the *permanent* introduction of either new area codes (with associated number changes) or all-services overlays (with mandatory 10-/11-digit dialing). The Pennsylvania PUC adopted a proposal contained in a Joint Petition of the Office of the Consumer Advocate, the Office of the Small Business Advocate, and MCI to create "Temporary Transparent Overlays" of the 717, 215 and 610 NPAs and to utilize these overlay NPAs only until permanent LNP and LRN-based number pooling become operational. Wireless carriers have objected to the Pennsylvania PUC's plan, contending that they cannot as a technical matter

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9 *Telephone Number Portability*, CC Docket No. 95-116, *First Memorandum Opinion and Order on Reconsideration*, FCC 97-74, 12 FCC Rcd. 7236, *released* March 11, 1997, Appendix B-4.

10 Pennsylvania PUC Docket Nos. P-00961027, P-00961061, P-00961071, *Petition of NPA Relief Coordinator Re: 412, 215/610, 717 Area Code Relief Plans*, Order, July 15, 1997.

participate in either the temporary transparent overlay or the permanent number pooling requirements.

While the Pennsylvania Commission's action has been affirmatively supported by consumer and small business advocates and by the IXCs and CLECs, and has been accepted (albeit somewhat begrudgingly) by the incumbent wireline carriers (ILECs), wireless carriers have attempted to block its implementation on the grounds that they could not participate in the temporary overlay arrangement.[11] As reflected in the August 22 NANC letter to the Common Carrier Bureau, wireless carriers contend that their inability to participate in the Pennsylvania PUC's plan, or in any form of number pooling with wireline carriers, makes such arrangements (both temporary and permanent) objectionable and in violation of the "technology neutrality" standard in the FCC's *Ameritech Ruling*.

II. DISCUSSION

The Commission must reject arguments that number pooling solutions violate the "technology neutral" standard. None of the transparent overlay or number pooling requirements that would be applied under an NXX-X LRN number assignment and pooling arrangement like the Pennsylvania PUC's present insurmountable obstacles for wireless carriers. At best these carriers' compliance and participation would impose modest economic burdens that are not consequentially different or greater than the economic burdens imposed under *any* number relief plan acceptable to wireless carriers upon ILECs, CLECs and, most significantly, upon *end users*.

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[11] A number of the wireless carriers in Pennsylvania are corporate affiliates of ILECs. As such, their stated objections to the transparent overlay and number pooling programs may well be part of a larger ILEC agenda, particularly since the ILECs' preferred solution — the all services overlay — is viewed by most CLECs

The cellular industry commenters in this proceeding focus entirely upon operational or economic limitations to their implementation of LNP as the cause of their purported inability to participate in LNP-based number pooling. None of these parties has cited any fundamental *technological* reason why they *cannot* participate in number pooling. Indeed, no such technological impediment exists. The only "impediment" to wireless industry participation is the regulatory decision that permits these carriers to *delay* investment in the technology needed for local number portability. For example, CTIA does not argue that wireless carriers *cannot* participate in number pooling, but merely avers that wireline carriers are unduly favored if number pooling is implemented "before wireless carriers can utilize numbers from the pool."[12] Similarly, BellSouth opposes number pooling because "*[u]nder the Commission's previously established LNP implementation schedules*," cellular carriers are not required to have LNP capability at the same time as wireline carriers.[13]

There is no insurmountable technical barrier to the wireless carriers' adoption of LNP right now. Indeed, as MCI has correctly noted, "no carrier is technologically barred from investing in LNP functionality — the absence of LNP capabilities is a business choice."[14] Wireless carriers were either permitted to defer, or were exempted altogether, from investing in and implementing LNP-related technology only in the context of local number portability itself, *i.e.,* the Commission presumably determined that, for wireless carriers, the incremental competitive gains from more expeditious

as disadvantageous and anticompetitive due to the incumbents' large inventory of "old" area code numbers.

12 Cellular Telecommunications Industry Association comments at 5.

13 BellSouth Comments at 4.

14 MCI Telecommunications Corporation comments at 5.

implementation of LNP did not justify the added costs. That determination does not create a technological limitation. Ad Hoc agrees with MCI that "[n]o technical limitation precludes wireless carriers from advancing their installation of LNP capabilities into their switching systems or upgrading to switches that support LNP."[15] Rather, these carriers have simply elected not to make the necessary investments in equipment possessing these capabilities and functionalities.

The wireless carriers' cost-based decision to forego LNP investment is not a valid basis for excusing them from adopting that technology for the purposes of number pooling or for permitting them to block what is in all other respects a more efficient and publicly beneficial method for managing numbering resources. As BellSouth observed, "in the case of LRN-based number pooling, wireline carriers will undertake significant costs and efforts to implement the technology, changing systems and operations to accommodate a NANP resource management plan...."[16] Despite this acknowledgment that wireline carriers will face these "significant costs," the wireless industry refuses to accept what is essentially a similar cost burden for the sake of establishing a more efficient use of existing numbering resources. Rejection of a number pooling solution merely because wireless carriers do not currently possess the switching capabilities required to support it effectively permits wireless carriers to avoid making investments that wireline carriers have been required to undertake. Such an outcome, if adopted, would not be technology neutral because it would unduly benefit wireless carriers while unduly disadvantaging wireline carriers and their customers who must then be

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15 *Id.* at 11.

16 BellSouth Comments at 5.

burdened with the additional costs of alternative, non-pooling number relief solutions.

Even if, *arguendo*, participation by wireless carriers in a number pooling solution were *impossible* as a technical matter, which is certainly far from the case, number pooling and number conservation measures as alternatives to the creation of additional area codes provide sufficiently large competitive and economic benefits to the balance of the telecommunications industry and to the public as a whole as to justify adoption. In short, the Commission's "technology neutrality" policy must not be permitted to create an ability for wireless carriers to impose their own (often self-created) technical limitations upon the remainder of the telecommunications industry and end user community, nor should it create a basis for the Commission to impose costly and burdensome number relief measures upon end users merely and solely because of the reluctance of wireless carriers to participate in reasonable technical alternatives.

The history of Chicago-area numbering matters, described in Section I, above, illustrates and underscores the difficulties and extensive societal costs that have been engendered as a direct consequence of the less-than-specific "technological neutrality" principle that the instant Public Notice now seeks to resolve. Now, by opposing NXX-X pooling, temporary transparent measures that rely upon remote call forwarding ("RCF") technology, and other efforts to control the demand for numbers, the wireless carriers seek to further limit the ability of regulators at both the state and federal levels to protect residential and business users from the costs, inconveniences, and other economic and social disruptions resulting from widespread changes in telephone numbers and/or dialing patterns, and to foster local *wireline* competition generally.

Wireless carriers' narrow, and almost entirely self-serving, concept of

"technology neutrality" may be better described as a notion of "technology transparency" from their standpoint. That is, any number relief policy or program that would require even modest modifications in the wireless carriers' operations is being characterized as failing the "technology neutrality" test. Indeed, as we recount below, wireless carriers have exhibited a pattern of excluding themselves from numbering burdens that are imposed upon others. This approach appears to be aimed at seeking a "least common denominator" numbering policy in which no number relief measures will be allowed unless every carrier and every type of service can fully participate with no differences in the costs of compliance, or (perhaps even more accurately) that wireless carriers can participate in at virtually no cost (to them) at all. Thus, while seemingly advocating a strict application of the "technology neutrality" principle,[17] the wireless carriers have in reality sought to exclude themselves entirely from numerous numbering-related requirements. Put simply, the wireless carriers' interpretation of the "technology neutrality" policy amounts to "no adverse impact upon wireless carriers."

A. Technological neutrality should not permit the special treatment in numbering matters that wireless carriers have frequently sought and received

To the extent that a policy of "technology neutrality" with respect to numbering issues is justified at all — and as we discuss below, the Ad Hoc Committee has serious concerns as to its actual merit — that policy must not be permitted to allow certain special interests, such as wireless carriers, to impose their own unique technological or, more accurately, *operational* limitations upon other carriers, services and users for whom such limitations are either not present or (perhaps) more readily overcome.

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17 *See, e.g.*, BellSouth Comments and Response of Bell Atlantic.

Since the issuance of the Ameritech Declaratory Ruling, wireless carriers across the country have invoked the "technological neutrality" principle to carve out for themselves special exemptions and exclusions from uniform numbering treatment and policy, and in the process have introduced numerous and serious problems in the orderly management and administration of the North American Numbering Plan, in the process imposing significant costs upon users. In marked contrast to the declarations of some wireless carriers that all they seek is a system ensuring the same treatment for all carriers,[18] the wireless industry has historically gone to great lengths to ensure *special* treatment for itself:

- Cellular carriers have demanded from state commissions and have been granted special "grandfather rights" in pre-existing area codes *when wireline carriers have been required to subject their subscribers to area code changes under geographic split solutions.*[19] Whereas wireline carriers have been required to change *all* of their customers' area codes in exchanges or rating areas in which the new area code was to apply, wireless carriers have been permitted to retain, sometimes, indefinitely, the *original* area code even though the exchange in which such numbers are rated is otherwise to be assigned to the new code.

- Wireless carriers have demanded and have obtained "duplicate" NXX codes in new area codes, providing them with an inventory of available NXX codes and telephone numbers far in excess of their actual or near-term projected need, and far in excess of the quantity of NXX codes that would otherwise be assigned to them under the Industry Numbering Committee (INC) Central Office Code Assignment Guidelines.[20]

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[18] Bell Atlantic, for example, states that the principle of "technology neutrality" requires that "[a]ll numbers should be equally available to carriers without regard to the technology they employ." (Bell Atlantic comments at 2.)

[19] *See, e.g., 708 Order* at 26; *312 Order*. In the latter case, not only were cellular carriers permitted to retain previously assigned '312' numbers in the City of Chicago, they were also permitted to retain suburban-rated '312' codes, and were additionally allowed to duplicate Chicago '312' codes in the '773' NPA. *See also* Mass. D.P.U. 96-61-A, *Order on Motions by Bell Atlantic NYNEX Mobile for Clarification and/or Reconsideration, NYNEX for Clarification and Reconsideration and Cellular One for Clarification, released* May 2, 1997.

[20] Code duplication was granted in the *708 Order*. However, in the *312 Order*, while code duplication for wireless carriers was once again granted, the Commission nonetheless warned the beneficiaries of its largesse of the potential consequences:

- Wireless carriers have demanded and have been allowed by the FCC to defer and, in the case of paging, have been granted outright exemption from, permanent Local Number Portability (LNP).[21]

- Despite their insistence upon "technologically neutral" numbering treatment and transparency in number assignment as between wireline and wireless services, wireless carriers have managed to exclude themselves from a common Location Routing Number (LRN) LNP system with wireline services, and are distinctly *not* required to, and will not, provide for LNP as between wireless and wireline services.[22]

These special treatments obtained by wireless carriers belie the CTIA's statement that "area code splits and overlays ... affect all consumers and carriers equally."[23] Indeed, splits and overlays generally affect the wireline carriers (and their customers) *far more* than their wireless counterparts.

These exemptions are not so much "technology-based" as they are driven by *operational* decisions motivated largely by the wireless carriers' efforts to avoid costs that other number users and their customers are forced to bear, and that appear to have been made largely for the convenience, economy, and/or competitive advantage of wireless carriers:[24]

> The commission cautions, however, that we cannot and will not permit the hoarding of NXX codes. Inclusion of the proviso in the Stipulation which requires that wireless carriers use their 312 and 733 NXX codes for new growth is essential to our approval of the code duplication provision. If the 773 area code exhausts in the future and it is shown that the duplicated NXX does were underutilized and thereby substantially contributed to a premature exhaust of NXX codes in that NPA or operated as a barrier to new market entry, then we will take all necessary steps to ensure that the costs and inconvenience associated with the number shortage are borne exclusively by those carriers engaging in that behavior.

312 Order at 23.

21 *Telephone Number Portability*, FCC CC Docket No. 95-116, *First Report and Order*, 11 FCC Rcd. 8352, July 2, 1996, at para. 156, 164-170. *Telephone Number Portability*, FCC CC Docket No. 95-116, *First Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd. 7236, *released* March 11, 1997.

22 *Id.* at para. 181.

23 Cellular Telecommunications Industry Association comments at 1.

24 While there may also be a cost basis for the wireless carriers' resistance to "service number

- Cellular carriers justify "grandfathering" pre-existing cellular numbers because of the alleged cost of reprogramming subscribers' cellular telephones[25] Such reprogramming undoubtedly entails some modest cost but changing a cellular subscriber's number will have far less impact upon that subscriber than will, for example, a change in his or her home or business phone number. Cellular subscribers must pay for air time on *incoming* calls so cellular numbers are rarely listed, published, or even given out. Indeed, the overwhelming majority of cellular calls are *outgoing* (industry estimates are as high as 80% or more[26]), and many cellular users may not even know or remember their cellular phone number. By contrast, the costs are far higher for wireline carriers and end users when their numbers are changed. Users of automatic dialing devices such as alarm systems and point-of-sale terminals confront far more formidable reprogramming requirements, often with significant public safety implications, to which little or no weight has been given when numbering decisions are made.[27]

- The purported basis for "code duplication" is the claimed need to also have a presence in the new geographic area code where the cellular carrier's NXXs are rated. Here, wireless carriers seek to "have their cake and eat it, too." That is, they want the cost benefit of grandfathering their preexisting numbers, while at the same time want the marketing benefit of offering customers numbers in the "home" area code (as it has been redefined following a geographic split.) With grandfathering alone, new customers would be offered "old" area code numbers, but with both grandfathering and duplication, the carriers can enjoy the best of both worlds. Of course, no other entity or end user is afforded such privilege.

- The postponement of or exemption from LNP of wireless carriers has been based upon claimed implementation difficulties allegedly unique to the wireless industry.[28] PageNet, however, recognizes that it is at least possible (and merits exploration) that "wireless carriers could voluntarily participate in these methods and thus share

portability" (under which they would be required to permit their customers to "port" numbers to wireline services), competitive considerations may also be at play. It is difficult to reconcile demands that are predicated upon competitive parity for "neutral" and "nondiscriminatory treatment" with respect to number resources while maintaining an outright refusal to participate in a comprehensive local number portability arrangement that would embrace wireline as well as wireless services.

25 While such grandfathering is expressly allowed by the Commission in the *Ameritech Ruling*, it is on its face inconsistent with the "technology neutrality" doctrine, because only wireless services are being afforded this special treatment. Ironically, having argued for uniform, nondiscriminatory treatment with respect to the assignment of NXX codes in geographic NPAs, wireless carriers seemingly have no problem using an out-of-area NPA code when it works to their own pecuniary or competitive benefit.

26 *Calling Party Pays Service Option in the Commercial Mobile Radio Services*, WT Docket No. 97-207, *Notice of Inquiry*, *released* October 23, 1997, FCC 97-341, at para. 10.

27 In some cases, so-called "permissive" dialing periods have been extended to accommodate alarm system reprogramming. At the very most, similar extensions of permissive dialing for cellular numbers might be reasonable. Grandfathering of "old" cellular numbers in perpetuity is not.

28 See BellSouth Comments at 3.

the existing codes"[29] before number portability is required. As the Pennsylvania OCA has correctly noted, moreover, the Commission in no sense precluded earlier compliance.[30]

- The claimed need for the total exemption from common wireline/wireless LNP (i.e., from implementation of service number portability) has also been founded upon alleged operational difficulties.

The effect of these various exemptions, deferrals, and special treatments (particularly grandfathering and code duplication) is to unnecessarily and unreasonably increase the assignment of NXX codes to wireless carriers, and to correspondingly decrease the efficiency with which such codes are utilized.

In testimony recently introduced in the Illinois number pooling proceeding, the Citizens Utility Board ("CUB") reported on the results of an extensive analysis of proprietary industry code utilization data that had been furnished to CUB by all code holders in the 847 NPA under subpoenas duces tecum issued by the Hearing Examiner in Illinois Commerce Commission Docket 97-0211.[31] According to CUB, as of June 1, 1997, utilization of the 450 *wireline* NXX codes in the 847 NPA was 58% as compared with only 30% for the 100 NXX codes assigned to the two cellular carriers serving 847.[32] And "utilization" for this purpose includes, in addition to revenue-producing working numbers assigned to end users, numbers being "aged" prior to reassignment, numbers held in reserve for end users, numbers set aside for testing, and numbers that

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29 Comments of Paging Network, Inc. at 5.

30 Comments of Pennsylvania Office of the Consumer Advocate at 5.

31 *Citizens Utility Board Petition to implement a form of telephone number conservation known as number pooling within the 312, 773, 847, 630 and 708 area codes*, Illinois Commerce Commission, Docket No. 97-0192, Additional Direct Testimony of J. Seamus Glynn on behalf of the Citizens Utility Board, filed October 24, 1997, at 5.

32 *Id.* at 15-16.

are considered "otherwise unassignable."[33] This quantitative evidence directly contradicts the unsupported claims submitted by wireless carriers that "CMRS providers, unlike wireline carriers, typically make efficient use of 10,000 blocks — CMRS provider's [*sic*] fill rates are typically higher than those of wireline carriers,"[34] ranging from 75%-80%.[35]

B. Special treatment for wireless carriers has imposed significant costs on users

Low NXX code utilization contributes directly to early NPA exhaust. Hence, there is a direct and inextricable link between the special privileges and treatments that may be afforded wireless carriers in the name of "technology neutrality" and the imposition of costs and burdens upon the public at large.

While there are obvious physical differences between wireline and wireless technologies and the types of services each is capable of offering, operational limitations, implementation difficulties, and simple pecuniary considerations cannot and must not be permitted to interfere with or constrain the orderly development and administration of a sound numbering policy or otherwise drive the management of this public resource in the public interest. To put it simply, wireless carriers should not be permitted to "have it both ways:" If they want and demand technological neutrality, they must be required to accommodate their own operations so as not to impose costs and other operational burdens upon wireline carriers and users of wireline services. Yet

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33 *Id.* at 5. In fact, CUB identified a total of 3.1-million in-use or otherwise "unassignable" numbers in the 847 NPA serving an area whose total population is only about 1.7-million. Assuming that "working" (i.e., in-service, revenue-producing) numbers are only 50% of the total "unassignable" quantity, wireline utilization rates would be roughly 29%, while cellular utilization would be only about 15%.

34 Sprint Spectrum L.P., d/b/a/ Spring PCS comments at 4.

35 Vanguard Cellular Systems, Inc. comments at 3.

that is precisely what has occurred since the issuance of the Ameritech Declaratory Ruling. Whatever limited merit, if any, that the various special treatments being demanded by wireless carriers may have, the costs imposed by wireless carriers upon others easily outweigh any costs or other burdens that may be identified by the wireless providers.

By demanding and receiving the grandfathering, code duplication, and other accommodations identified above, wireless carriers have contributed to and accelerated precipitously the exhaust of NXX codes in existing NPAs. By attempting to block rational efforts at number conservation and alternatives to the creation of permanent new NPAs and/or new mandatory dialing patterns (e.g., mandatory 10/11-digit local dialing on all calls), wireless carriers impose costs upon users of wireline services that far outweigh those that wireless carriers may avoid if their various demands continue to be honored.

- Businesses have to incur significant costs to change telephone numbers, reprogram PBXs and dialing devices, advertise their new numbers, and often make extensive and costly revisions to their own customer, supplier and other data bases to revise the telephone numbers contained therein.

- Consumers are required to accept sometimes frequent number changes (some Chicago-area communities may soon be subject to their third area code change within ten years) and to incur the various costs and inconveniences associated therewith.

- Consumers pay unnecessarily higher rates for basic services when local exchange carriers are required to incur costs to change telephone numbers unnecessarily. Carriers attempt to recover those costs from their customers either through "exogenous cost changes" in price cap plans or through revenue requirement increases under rate of return regulation.

- CLECs are competitively disadvantaged, and thus the benefits to users of a competitive marketplace are delayed or denied, because CLECs often have difficulty obtaining an adequate supply of telephone numbers during "jeopardy" situations and under all-services overlays cannot offer their potential customers

telephone numbers in the "old" area code.

The wireless carriers and the FCC have identified no reason why cellular carriers and their customers should be held harmless from the costs of numbering churn when all other industry segments and customers would be required to bear the burden associated with area code relief.

In asking for grandfathering or other special treatment, the cellular carriers selectively apply the "technology neutrality" standard. Singling out cellular carriers for the special accommodations identified above while imposing costs and inconveniences like number churn upon wireline services and users is no less of a service-specific discrimination than a wireless-only overlay. Indeed, as MCI has noted, even disregarding these examples of special treatment, wireless carriers currently have inherent, technologically-based *advantages* in NPA jeopardy situations.[36] True technological neutrality "would therefore dictate that wireless carriers would be required to employ rate centers, or that rate centers should be abolished for all carriers, in order to ensure absolute number access parity..." in jeopardy situations.[37]

Moreover, while selective application of special accommodations might be appropriate if the result was privately beneficial to the wireless carriers without being detrimental to others, that is clearly not the case here. Grandfathering of cellular numbers in '312' accelerated the need to split Chicago into two NPAs; code duplication in all of the Chicago-area NPAs results in underutilized NXX codes and (absent effective number conservation measures) would have the effect of accelerating code

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36 Comments of MCI at 13.

37 *Id.* at 13.

exhaust in one or more of these already-split NPAs.

A permanent wireless overlay would have eliminated the need for periodic cellular number changes as well as the need for wireline number changes. The wireless industry rejected that solution, however,[38] and therefore must not now be permitted to burden the community at large by virtue of the alleged costs and limitations in cellular technology.

C. The Commission's "technology neutral" standard must be pro-competitive

A number of commenters argue that technological neutrality must be considered separately from competitive neutrality.[39] But the "technology neutral" treatment sought by the wireless carriers imposes costs and other burdens, including the loss of "competitive neutrality," upon the public at large. Accordingly, the Commission must apply the "technology neutral" standard where economically reasonable and efficient, rather than as an absolute "right" to which the wireless carriers claim some inalienable entitlement. While the Ad Hoc Committee shares the Commission's desire to maximize competition and minimize overall costs, it believes that neither of these goals is served by the wireless carriers' self-serving interpretation of the "technological neutrality" numbering policy or by its absolute application in the manner in which many wireless carriers propose.

Even the underlying rationale advanced by wireless carriers for unwavering adherence to the "technology neutral" standard is contradicted by their own actions. For example, since wireless carriers are not required to "port" wireless numbers to

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38 And continues to do so in the present proceeding. *See* Paging Network, Inc. comments at 6.

39 BellSouth Comments at 5; Bell Atlantic comments at 3.

wireline carriers, in an LNP environment consumers will not perceive, or be permitted to perceive, numbers as being transparent as between wireline and wireless services. Yet the very transparency that wireless carriers contend is so essential for their own ability to compete with other (wireline) technologies has the effect of diminishing the competitiveness of other new (non-ILEC-affiliated) entrants. CLECs who cannot obtain adequate number resources cannot compete at all in a given geographic area, creating a far more serious anticompetitive effect than the simple "perception" of some difference between wireline and wireless services were wireless-only overlays to be allowed. Finally, any costs that wireless carriers may avoid as a result of their various special treatments must be weighed against the costs, burdens and anticompetitive impacts that their special treatments impose upon others.

While the Commission may see merit in blurring the distinction between wireline and wireless services by prohibiting technology-specific numbering treatments, the case for masking the distinction from the end user's perspective between geographically fixed and mobile services is far less compelling. Indeed, in actively seeking "Calling Party Pays" rate treatment for wireline-initiated calls to wireless services (CITE), the wireless industry is itself introducing the very type of service-specific distinction that its (and the Commission's) technology-neutral numbering policy is intended to eliminate.[40]

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[40] Customers can generally determine whether a call to be placed to a given telephone number will be subject to local vs. toll rate treatment; indeed, in a number of jurisdictions, such dialing pattern distinctions are mandatory. In most cases, the distinction between "local" and "toll" can be made by the user based upon either the number of digits or the area code of the called number. If cellular calling party pays numbers are not similarly distinguishable from other numbers to which no special (and high-priced) air time charge will apply, customers may be misled into placing calls that carry unexpected charges.

D. The "technology neutrality" policy should protect against arbitrary exclusion from geographically-based NPAs, and should permit regulatory efforts to impose reasonable and efficient technical standards and requirements

A strict constructionist application of the principle of technology neutrality in numbering policy would not permit the kind of special treatment that the wireless carriers have demanded and received. Similarly, a flexible application of this principle must be balanced so as not to unduly favor one technology while burdening others, as the special treatments afforded wireless carriers have accomplished. Accordingly, the Ad Hoc Committee respectfully urges the Commission to refine its prior determination with respect to overlays, and consider permitting distinctions to be made in number assignments as between geographically fixed and mobile (if not specifically wireline vs. wireless) services where such distinctions would be reasonable and efficient.

In addition, the Committee urges the Commission to support innovative efforts at addressing number relief issues, such as the plan adopted by the Pennsylvania PUC. Pennsylvania has adopted a two-pronged approach that (a) applies *temporary* measures to avoid the need for a *permanent* area code split pending availability of LRN LNP technology, and (b) adopts number pooling and number conservation as the permanent solution once the technology to support this approach is operational. The effect of the Pennsylvania plan is to eliminate the need for further number or dialing pattern changes while making a large supply of new numbers available for CLECs. The Commission should soundly reject efforts by wireless interests to interfere with such initiatives; if the Commission determines that the Pennsylvania PUC's plan does not fully comport with its "technology neutrality" policy, then it is that policy that should